

## ABSTRACT

The inventive method assesses the stability of an electric power transmission network, where said network comprises a plurality of substations, buses and lines, and a system protection center (8). It comprises the steps of

1. measuring phasor data (9) for voltages and currents at a plurality of locations of the network,
2. transmitting said phasor data (9) to said system protection center (8),
3. transmitting information (5) regarding the state of switches of at least one substation to the system protection center (8), and
4. the system protection center (8) determining at least one stability margin value of the transmission network.

In this way, detailed real-time information about the state of the network is collected at a system level of the network, allowing a corresponding global analysis of the information.

In a preferred embodiment of the invention, the system protection center determines one or more control commands (6), based on the phasor data (9) and on the state of switches. The control commands (5) are transmitted to at least one substation and executed there.

(figure 2)